RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: _09/211,297_

Source: _____

Date Processed by STIC: _____

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RAW SEQUENCE LISTING   DATE: 05/03/2005
PATENT APPLICATION: US/09/211,297   TIME: 13:27:53

Input Set : **N:\Crf3\RULE60\09211297.raw.txt**
Output Set: **N:\CRF4\05032005\I211297.raw**

SEQUENCE LISTING

```
 3 (1) GENERAL INFORMATION:
 5      (i) APPLICANT: Boyle, William J.
 7     (ii) TITLE OF INVENTION: Osteoprotegerin Binding Proteins
 9    (iii) NUMBER OF SEQUENCES: 39
11     (iv) CORRESPONDENCE ADDRESS:
12          (A) ADDRESSEE: Amgen Inc.
13          (B) STREET: One Amgen Center Drive
14          (C) CITY: Thousand Oaks
15          (D) STATE: California
16          (E) COUNTRY: USA
17          (F) ZIP: 91320-1789
19      (v) COMPUTER READABLE FORM:
20          (A) MEDIUM TYPE: Floppy disk
21          (B) COMPUTER: IBM PC compatible
22          (C) OPERATING SYSTEM: PC-DOS/MS-DOS
23          (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
25     (vi) CURRENT APPLICATION DATA:
```

C--> 26   **(A) APPLICATION NUMBER: US/09/211,297**
C--> 27   **(B) FILING DATE: 14-Dec-1998**
W--> 33   **(C) CLASSIFICATION: 514**
C--> 30   **(vii) PRIOR APPLICATION DATA:**

```
31          (A) APPLICATION NUMBER: US/08/880,855
32          (B) FILING DATE: 23-06-1997
35   (viii) ATTORNEY/AGENT INFORMATION:
36          (A) NAME: Winter, Robert B.
37          (C) REFERENCE/DOCKET NUMBER: A-451A
40 (2) INFORMATION FOR SEQ ID NO: 1:
42      (i) SEQUENCE CHARACTERISTICS:
43          (A) LENGTH: 8 amino acids
44          (B) TYPE: amino acid
45          (C) STRANDEDNESS: single
46          (D) TOPOLOGY: linear
48     (ii) MOLECULE TYPE: protein
53     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
55     Asp Pro Asn Arg Gln Asp Ile Asp
56     1               5
58 (2) INFORMATION FOR SEQ ID NO: 2:
60      (i) SEQUENCE CHARACTERISTICS:
61          (A) LENGTH: 52 base pairs
62          (B) TYPE: nucleic acid
63          (C) STRANDEDNESS: single
64          (D) TOPOLOGY: linear
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```
66      (ii) MOLECULE TYPE: cDNA
71      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
73 GTTCTCCTCA TATGGATCCA AACCGTATTT CTGAAGACAG CACTCACTGC TT        52
75 (2) INFORMATION FOR SEQ ID NO: 3:
77      (i) SEQUENCE CHARACTERISTICS:
78          (A) LENGTH: 37 base pairs
79          (B) TYPE: nucleic acid
80          (C) STRANDEDNESS: single
81          (D) TOPOLOGY: linear
83      (ii) MOLECULE TYPE: cDNA
88      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
90 TACGCACTCC GCGGTTAGTC TATGTCCTGA ACTTTGA                          37
92 (2) INFORMATION FOR SEQ ID NO: 4:
94      (i) SEQUENCE CHARACTERISTICS:
95          (A) LENGTH: 8 amino acids
96          (B) TYPE: amino acid
97          (C) STRANDEDNESS: single
98          (D) TOPOLOGY: linear
100     (ii) MOLECULE TYPE: protein
105     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
107      Glu Asn Ala Gly Gln Asp Ile Asp
108      1                 5
110 (2) INFORMATION FOR SEQ ID NO: 5:
112     (i) SEQUENCE CHARACTERISTICS:
113         (A) LENGTH: 51 base pairs
114         (B) TYPE: nucleic acid
115         (C) STRANDEDNESS: single
116         (D) TOPOLOGY: linear
118     (ii) MOLECULE TYPE: cDNA
123     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
125 ATTTGATTCT AGAAGGAGGA ATAACATATG CATGAAAACG CAGGTCTGCA G          51
127 (2) INFORMATION FOR SEQ ID NO: 6:
129     (i) SEQUENCE CHARACTERISTICS:
130         (A) LENGTH: 42 base pairs
131         (B) TYPE: nucleic acid
132         (C) STRANDEDNESS: single
133         (D) TOPOLOGY: linear
135     (ii) MOLECULE TYPE: cDNA
140     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
142 TATCCGCGGA TCCTCGAGTT AGTCTATGTC CTGAACTTTG AA                    42
144 (2) INFORMATION FOR SEQ ID NO: 7:
146     (i) SEQUENCE CHARACTERISTICS:
147         (A) LENGTH: 8 amino acids
148         (B) TYPE: amino acid
149         (C) STRANDEDNESS: single
150         (D) TOPOLOGY: linear
152     (ii) MOLECULE TYPE: protein
157     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
159      Glu Asp Thr Leu Gln Asp Ile Asp
```

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        RAW SEQUENCE LISTING              DATE: 05/03/2005
        PATENT APPLICATION:  US/09/211,297    TIME: 13:27:53

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160     1           5
162 (2) INFORMATION FOR SEQ ID NO: 8:
164     (i) SEQUENCE CHARACTERISTICS:
165         (A) LENGTH: 54 base pairs
166         (B) TYPE: nucleic acid
167         (C) STRANDEDNESS: single
168         (D) TOPOLOGY: linear
170     (ii) MOLECULE TYPE: cDNA
175     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
177 ATTTGATTCT AGAAGGAGGA ATAACATATG TCTGAAGACA CTCTGCCGGA CTCC          54
179 (2) INFORMATION FOR SEQ ID NO: 9:
181     (i) SEQUENCE CHARACTERISTICS:
182         (A) LENGTH: 9 amino acids
183         (B) TYPE: amino acid
184         (C) STRANDEDNESS: single
185         (D) TOPOLOGY: linear
187     (ii) MOLECULE TYPE: protein
192     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
194     Lys Gln Ala Phe Gln Gln Asp Ile Asp
195     1           5
197 (2) INFORMATION FOR SEQ ID NO: 10:
199     (i) SEQUENCE CHARACTERISTICS:
200         (A) LENGTH: 48 base pairs
201         (B) TYPE: nucleic acid
202         (C) STRANDEDNESS: single
203         (D) TOPOLOGY: linear
205     (ii) MOLECULE TYPE: cDNA
210     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
212 ATTTGATTCT AGAAGGAGGA ATAACATATG AAACAAGCTT TTCAGGGG          48
214 (2) INFORMATION FOR SEQ ID NO: 11:
216     (i) SEQUENCE CHARACTERISTICS:
217         (A) LENGTH: 10 amino acids
218         (B) TYPE: amino acid
219         (C) STRANDEDNESS: single
220         (D) TOPOLOGY: linear
222     (ii) MOLECULE TYPE: protein
227     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
229     Met Lys Glu Leu Gln His Gln Asp Ile Asp
230     1           5                 10
232 (2) INFORMATION FOR SEQ ID NO: 12:
234     (i) SEQUENCE CHARACTERISTICS:
235         (A) LENGTH: 51 base pairs
236         (B) TYPE: nucleic acid
237         (C) STRANDEDNESS: single
238         (D) TOPOLOGY: linear
240     (ii) MOLECULE TYPE: cDNA
245     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
247 ATTTGATTCT AGAAGGAGGA ATAACATATG AAAGAACTGC AGCACATTGT G          51
249 (2) INFORMATION FOR SEQ ID NO: 13:
```

RAW SEQUENCE LISTING   DATE: 05/03/2005
PATENT APPLICATION: US/09/211,297   TIME: 13:27:53

Input Set : N:\Crf3\RULE60\09211297.raw.txt
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```
251        (i) SEQUENCE CHARACTERISTICS:
252            (A) LENGTH: 10 amino acids
253            (B) TYPE: amino acid
254            (C) STRANDEDNESS: single
255            (D) TOPOLOGY: linear
257       (ii) MOLECULE TYPE: protein
262       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
264     Met Gln Arg Phe Ser Gly Gln Asp Ile Asp
265     1               5                   10
267 (2) INFORMATION FOR SEQ ID NO: 14:
269        (i) SEQUENCE CHARACTERISTICS:
270            (A) LENGTH: 51 base pairs
271            (B) TYPE: nucleic acid
272            (C) STRANDEDNESS: single
273            (D) TOPOLOGY: linear
275       (ii) MOLECULE TYPE: cDNA
280       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
282 ATTTGATTCT AGAAGGAGGA ATAACATATG CAGCGTTTCT CTGGTGCTCC A         51
284 (2) INFORMATION FOR SEQ ID NO: 15:
286        (i) SEQUENCE CHARACTERISTICS:
287            (A) LENGTH: 9 amino acids
288            (B) TYPE: amino acid
289            (C) STRANDEDNESS: single
290            (D) TOPOLOGY: linear
292       (ii) MOLECULE TYPE: protein
297       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
299     Met Glu Gly Ser Trp Gln Asp Ile Asp
300     1               5
302 (2) INFORMATION FOR SEQ ID NO: 16:
304        (i) SEQUENCE CHARACTERISTICS:
305            (A) LENGTH: 40 base pairs
306            (B) TYPE: nucleic acid
307            (C) STRANDEDNESS: single
308            (D) TOPOLOGY: linear
310       (ii) MOLECULE TYPE: cDNA
315       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
317 GTTCTCCTCA TATGGAAGGT TCTTGGTTGG ATGTGGCCCA                       40
319 (2) INFORMATION FOR SEQ ID NO: 17:
321        (i) SEQUENCE CHARACTERISTICS:
322            (A) LENGTH: 9 amino acids
323            (B) TYPE: amino acid
324            (C) STRANDEDNESS: single
325            (D) TOPOLOGY: linear
327       (ii) MOLECULE TYPE: protein
332       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
334     Met Arg Gly Lys Pro Gln Asp Ile Asp
335     1               5
337 (2) INFORMATION FOR SEQ ID NO: 18:
339        (i) SEQUENCE CHARACTERISTICS:
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Input Set : N:\Crf3\RULE60\09211297.raw.txt
Output Set: N:\CRF4\05032005\I211297.raw

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340         (A) LENGTH: 44 base pairs
341         (B) TYPE: nucleic acid
342         (C) STRANDEDNESS: single
343         (D) TOPOLOGY: linear
345     (ii) MOLECULE TYPE: cDNA
350     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
352 GTTCTCCTCA TATGCGTGGT AAACCTGAAG CTCAACCATT TGCA                    44
354 (2) INFORMATION FOR SEQ ID NO: 19:
356     (i) SEQUENCE CHARACTERISTICS:
357         (A) LENGTH: 9 amino acids
358         (B) TYPE: amino acid
359         (C) STRANDEDNESS: single
360         (D) TOPOLOGY: linear
362     (ii) MOLECULE TYPE: protein
367     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
369     Met Lys Pro Glu Ala Gln Asp Ile Asp
370     1               5
372 (2) INFORMATION FOR SEQ ID NO: 20:
374     (i) SEQUENCE CHARACTERISTICS:
375         (A) LENGTH: 53 base pairs
376         (B) TYPE: nucleic acid
377         (C) STRANDEDNESS: single
378         (D) TOPOLOGY: linear
380     (ii) MOLECULE TYPE: cDNA
385   , (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
387 GTTCTCCTCA TATGAAACCT GAAGCTCAAC CATTTGCACA CCTCACCATC AAT          53
389 (2) INFORMATION FOR SEQ ID NO: 21:
391     (i) SEQUENCE CHARACTERISTICS:
392         (A) LENGTH: 9 amino acids
393         (B) TYPE: amino acid
394         (C) STRANDEDNESS: single
395         (D) TOPOLOGY: linear
397     (ii) MOLECULE TYPE: protein
402     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
404     Met His Leu Thr Ile Gln Asp Ile Asp
405     1               5
407 (2) INFORMATION FOR SEQ ID NO: 22:
409     (i) SEQUENCE CHARACTERISTICS:
410         (A) LENGTH: 65 base pairs
411         (B) TYPE: nucleic acid
412         (C) STRANDEDNESS: single
413         (D) TOPOLOGY: linear
415     (ii) MOLECULE TYPE: cDNA
420     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
422 GTTCTCCTCA TATGCATTTA ACTATTAACG CTGCATCTAT CCCATCGGGT TCCCATAAAG    60
424 TCACT                                                               65
426 (2) INFORMATION FOR SEQ ID NO: 23:
428     (i) SEQUENCE CHARACTERISTICS:
429         (A) LENGTH: 9 amino acids
```

VERIFICATION SUMMARY   DATE: 05/03/2005
PATENT APPLICATION: US/09/211,297   TIME: 13:27:54

Input Set : N:\Crf3\RULE60\09211297.raw.txt
Output Set: N:\CRF4\05032005\I211297.raw

L:26 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:27 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:30 M:220 C: Keyword misspelled or invalid format, [(vii) PRIOR APPLICATION DATA:]
L:33 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)